

### REMARKS

This Amendment is submitted in response to the non-final Office Action mailed on August 21, 2008. A petition for one-month extension of time is submitted herewith. The Director is authorized to charge the amount of \$130.00 for the cost of the petition for a one month extension of time and any additional fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112857-505 on the account statement.

Claims 24-46 are pending in this application. Claims 1-23 were previously canceled without prejudice or disclaimer. In the Office Action, Claims 1-23 are rejected under 35 U.S.C. §103. In response, Claim 28 has been amended and Claims 47-49 have been newly added. The amendment does not add new matter. These Claims do not add new matter. At least for the reasons set forth below, Applicants respectfully submit that the rejections should be withdrawn.

Applicants note that the Patent Office rejected canceled Claims 1-23 and apparently has not considered previously presented Claims 24-46. Applicants respectfully submit that the cancellation of Claims 1-23 renders the Patent Office's rejections moot and that such rejections should be withdrawn. However, because Claims 24-46 are similar to rejected Claims 1-23, Applicants have addressed the Patent Office's rejections of the canceled claims in order to demonstrate the patentability of currently pending Claims 24-46.

Applicants note that Claim 28 has been amended solely for clarification purposes to be consistent with independent Claim 24 from which it depends.

In the Office Action, Claims 1-2, 5-12, 14-17 and 20-22 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,475,271 to Shibasaki et al. ("*Shibasaki*") in view of U.S. Patent No. 6,555,989 to Pearson ("*Pearson*"). These claims correspond to currently pending Claims 24-25, 28-35, 37-40 and 43-45. Applicants respectfully submit that, even if combinable, the cited references fail to disclose or suggest each and every element of independent Claims 24, 37 and 39 and Claims 25, 28-35, 38, 40 and 43-45 that depend therefrom for at least the reasons set forth below.

Independent Claims 24 and 39 recite, in part, electronic equipment comprising a power source connected to the body via a predetermined bus, including a secondary battery, secondary battery control means for controlling the secondary battery, a fuel cell which causes a predetermined fuel and air to electrochemically react with each other so as to cause a power

generating unit to generate power, and fuel cell control means for controlling the fuel cell, wherein the secondary battery control means and the fuel cell control means mutually transfer at least remaining secondary battery power information indicative of an amount of power remaining in the secondary battery and a fuel cell status information indicative of a status of the fuel battery, to each other via the bus.

Similarly, currently amended independent Claim 37 recites, in part, a power management method for electronic equipment that includes a body at least having processing means for executing various processes and consuming power; and a power source connected to the body via a predetermined bus, including a secondary battery, secondary battery control means for controlling the secondary battery, a fuel cell which causes a predetermined fuel and air to electrochemically react with each other so as to cause a power generating unit to generate power, and fuel cell control means for controlling the fuel cell; wherein the electronic equipment operates on the basis of the power source, the power management method for the electronic equipment, comprising: mutually transferring at least remaining secondary battery power information indicative of an amount of power remaining in the secondary battery and fuel cell status information indicative of a status of the fuel battery between the secondary battery control means and the fuel cell control means via the bus. In contrast, the cited references, even if combinable, fail to disclose every element of the present claims.

For example, the cited references fail to disclose or suggest that the secondary battery control means and the fuel cell control means mutually transfer at least remaining secondary battery power information and a fuel cell status information to each other via the bus as required, in part, by independent Claims 24 and 37. The Patent Office admits that *Shibasaki* does not disclose: (1) a fuel cell or a fuel cell control means, or (2) that the secondary battery control means and the fuel cell control means mutually transfer information to each other. See, Office Action, page 3, lines 14-19; page 4, lines 1-2. Instead, the Patent Office relies on *Pearson* for the claimed elements, asserting that “*Pearson* is evidence that ordinary workers in the art would find a reason, suggestion or motivation to include in the power source equipment for the electronic device a back up and load leveler hybrid fuel cell battery.” See, Office Action, page 4, lines 11-20. However, the portion of *Pearson* relied on by the Patent Office merely discloses a fuel cell stack and rechargeable storage battery coupled together via a DC-DC current converter. See, *Pearson*, Abstract, lines 1-3; column 4, lines 7-10. As in “typical hybrid systems,” the fuel

cell and storage battery are electrically connected across the inputs and outputs of the DC-DC converter. See, *Pearson*, column 1, lines 38-43. Thus, the DC-DC current converter “advantageously [] electrically isolate[s] the fuel cell from the storage battery.” Nowhere does *Pearson* disclose that the fuel cell and secondary battery are connected to a bus and mutually communicate or transfer data to each other via the bus.

The Patent Office asserts that *Pearson* discloses a secondary battery control means and a fuel cell control means that mutually transfer remaining secondary battery power information and fuel cell status information to each other via signals sent through a bus. See, Office Action, page 4, lines 12-17. However, the portion of *Pearson* relied on by the Patent Office merely discloses that certain signals indicative of the desired current output, the charge flowing through the battery, and the desired current for the battery “are provided” to the charge controller and the fuel cell supply subsystem. See, *Pearson*, column 5, lines 2-3 and 58-67. Nowhere does *Pearson* disclose or suggest that the signals are mutually transferred between the secondary battery control means and the fuel cell control means via a bus. In fact, the signal indicative of the desired output current of the DC-DC converter “is provided by computing unit 63 to reactant supply subsystem 10,” rather than transferred to subsystem 10 by the charge controller. See, *Pearson*, column 5, lines 64-67. Furthermore, the signal indicative of the charge flowing through the battery is provided to the charge controller from an ammeter. See, *Pearson*, column 5, lines 58-60. Likewise, signals 67 and 69 cited by the Patent Office are provided to the computer unit from the charge controller and the ammeter. See, *Pearson*, column 5, lines 60-64. Nowhere does *Pearson* disclose or suggest that information is mutually transferred between the secondary battery control means and the fuel cell control means.

Moreover, *Pearson* never discloses the use of a bus to transfer such information. Instead, *Pearson* is entirely directed to a system that requires the use of several instruments, such as an ammeter, as well as the computer unit and a DC-DC converter, to transfer information to and from the fuel cell control means and the secondary battery control means. See, *Pearson*, column 5, lines 2-67. Therefore, *Pearson* fails to disclose that the secondary battery control means and the fuel cell control means mutually transfer data to each other via a bus. As such, Applicants respectfully submit that the cited references fail to disclose or suggest that the secondary battery control means and the fuel cell control means mutually transfer at least remaining secondary battery power information and a fuel cell status information to each other via the bus as required,

in part, by independent Claims 24 and 39 and Claims 25, 28-35, 40 and 43-45 that depend therefrom. For similar reasons, the cited references also fail to disclose mutually transferring at least remaining secondary battery power information indicative of an amount of power remaining in the secondary battery and fuel cell status information indicative of a status of the fuel battery between the secondary battery control means and the fuel cell control means via the bus as required, in part, by independent Claim 37 and Claim 38 that depends therefrom.

Accordingly, Applicants respectfully request that Claims 24-25, 28-35, 37-40 and 43-45 are patentable over *Shibasaki* in view of *Pearson*.

In the Office Action, Claims 3-4, 13, 18-19 and 23 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Shibasaki* in view of *Pearson* and further in view of U.S. Patent No. 6,069,465 to de Boois et al. ("*de Boois*"). These claims correspond to currently pending Claims 26-27, 36, 41-42 and 46. Applicants respectfully submit that the cited references fail to disclose or suggest each and every element of Claims 26-27, 36, 41-42 and 46.

As discussed previously, *Shibasaki* and *Pearson* fail to disclose or suggest, at a minimum, that the secondary battery control means and the fuel cell control means mutually transfer at least remaining secondary battery power information and a fuel cell status information to each other via the bus. The Patent Office relies on *de Boois* merely as support for a fuel cell control means which sets a plurality of operating modes for the fuel cell as required, in part, by Claims 26-27, 36, 41-42 and 46. See, Office Action, page 6, lines 7-22; page 7, lines 1-2. Thus, Applicants respectfully submit that, even if properly combinable, *de Boois* fails to remedy the deficiencies of *Shibasaki* and *Pearson* with respect to the present claims.

Accordingly, Applicants respectfully request that Claims 26-27, 36, 41-42 and 46 are patentable over *Shibasaki* in view of *Pearson* and further in view of *de Boois*.

Applicants further note that Claims 47-49 have been newly added. The new Claims are fully supported in the Specification at, for example, page 3, paragraph 30, lines 1-7; Figure 1. No new matter has been added thereby. Applicants respectfully submit that the subject matter as defined in the newly added claims is patentable over the cited art for at least substantially the same reasons as discussed above.

For the foregoing reasons, Applicants respectfully submit that the present application is in condition for allowance and earnestly solicit reconsideration of same.

Respectfully submitted,

BELL, BOYD & LLOYD LLP

BY 

Thomas C. Basso  
Reg. No. 46,541  
Customer No. 29175

Date: December 1, 2008